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(54) **ELECTROMAGNETIC CONNECTIONS FOR DYNAMICALLY MATING AND UN-MATING A WIRED HEAD-MOUNTED DISPLAY**

(52) **U.S. Cl.**
CPC **H01R 13/6205** (2013.01); **G06F 1/1683** (2013.01); **G06F 1/163** (2013.01)

(71) Applicant: **OCULUS VR, LLC**, Menlo Park, CA (US)

(57) **ABSTRACT**

(72) Inventor: **Matthew James Devoe**, Menlo Park, CA (US)

An apparatus for electrically connecting electronic devices includes a first connector including an electromagnet. The apparatus also includes a second connector that includes a magnetic element and is detachably coupleable to the first connector. The electromagnet is energizable to selectively couple and decouple the first and second connectors. The apparatus further includes a force transducer coupleable to the electromagnet to measure a coupling force between the first and second connector and transmit a signal based on the coupling force, and a controller coupleable to the force transducer to receive the signal from the force transducer. The controller is coupleable to a power source to control the electromagnet.

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